



THE SECRETARY OF THE INTERIOR
WASHINGTON

Record of Decision

Lower Colorado River Multi-Species Conservation Plan

April 2005

Approved

Gale A. Norton
Secretary of the Department of the Interior

Date

**RECORD OF DECISION
LOWER COLORADO RIVER
MULTI-SPECIES CONSERVATION PROGRAM**

**FINAL ENVIRONMENTAL IMPACT STATEMENT
(DECEMBER 2004)**

I. Introduction

This document constitutes the Record of Decision (ROD) of the Department of the Interior regarding the Lower Colorado River Multi-Species Conservation Program (LCR MSCP).

The importance of the Colorado River to the southwestern portion of the United States cannot be overstated: the Colorado is the lifeblood of the southwest. The Colorado River provides water and power to over 20 million people (in cities such as Los Angeles, San Diego, Las Vegas, Phoenix and Tucson), irrigates over 2 million acres, and generates up to 10 billion kilowatt-hours of electricity annually.

The Secretary of the Interior has statutory responsibility for the operation of Hoover Dam, Davis Dam and other facilities on the lower Colorado River which constitute a “vast, interlocking machinery--a dozen major works delivering water according to congressionally fixed priorities for home, agricultural, and industrial uses to people spread over thousands of square miles.” *Arizona v. California*, 373 U.S. 546, 589 (1963). In exercising this authority Congress “entrusted [the Secretary] with sufficient power ... to direct, manage, and coordinate their operation.” *Id.* at 590. In this capacity, the Secretary serves a “water master” function on the lower Colorado River (LCR) and is required to operate the LCR pursuant to a body of law commonly referred to as the “Law of the River.”¹

Congress has also delegated statutory responsibility to the Secretary for administration of the Endangered Species Act of 1973 (ESA), for the purpose of conserving species and the ecosystems upon which they depend. The Supreme Court has stated that “[a]s it was finally passed, the Endangered Species Act of 1973 represented the most comprehensive legislation for the preservation of endangered species ever enacted by any nation. Its stated purposes were “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved,” and “to provide a program for the conservation of such ... species” *TVA v. Hill*, 437 U.S. 153, 180 (1978) (citations omitted).

The LCR MSCP has been designed to implement and harmonize these statutory responsibilities.²

¹ The “Law of the River” includes interstate compacts, an international treaty, a Supreme Court decree and injunction, applicable federal statutes, regulations and contracts, and other documents and agreements that control the management and distribution of the Colorado River. *See e.g., Defenders of Wildlife v. Norton*, 257 F. Supp. 2d 53 (D.D.C. 2003). *See § II, infra*, for a detailed discussion of this topic.

² In addition to the operation of major facilities on the lower Colorado River, the LCR MSCP addresses federal actions by the Bureau of Indian Affairs, the Bureau of Land Management, the National Park Service and the U.S. Fish & Wildlife Service and the Western Area Power Administration (U.S. Department of Energy). The LCR MSCP also addresses actions by over forty non-federal entities from the States of Arizona, California and Nevada. These non-federal entities rely on the Colorado River for water and power supplies and also manage resource programs on the lower Colorado River. *See generally*, Final LCR MSCP Biological Assessment and Final Habitat Conservation

The Bureau of Reclamation (Reclamation) and the Fish and Wildlife Service (Service), as the agencies that are designated to act on the Secretary's behalf with respect to these matters, are the joint co-leads for the purposes of compliance with the National Environmental Policy Act of 1969 (NEPA) for the development and implementation of the LCR MSCP. The two lead agencies for NEPA and The Metropolitan Water District of Southern California (Metropolitan) as the lead agency for the California Environmental Quality Act (CEQA), prepared an Environmental Impact Statement/Environmental Impact Report (EIS/EIR) that analyzes the effects of the proposed action on the human environment.

For the Service, the EIS evaluates the effects of issuing a section 10(a)(1)(B) permit to the non-federal participants of the LCR MSCP. For Reclamation, the EIS evaluates the effects of implementing the conservation measures in the LCR MSCP Habitat Conservation Plan (HCP), and for Metropolitan, the EIR evaluates the effects of implementing the conservation measures in the LCR MSCP HCP.³

The Final Environmental Impact Statement (FEIS) was prepared pursuant to NEPA, as amended, the Council on Environmental Quality's (CEQ) Regulations for Implementing the Procedural Provisions of NEPA (40 Code of Federal Regulations [CFR] Parts 1500 through 1508), Department of the Interior Policies, and Reclamation and the Service NEPA Handbooks. The LCR MSCP is the subject of the FEIS filed with the Environmental Protection Agency (EPA) (FES-04-47) and noticed by the EPA, Reclamation and the Service in the Federal Register on December 17, 2004 (69 Fed. Reg. 75556). Alternatives have been fully described in detail and evaluated in the FEIS.

The LCR MSCP is a cooperative effort between Federal and non-federal entities for the purpose of:

- C conserving habitat and working toward the recovery of threatened and endangered species, as well as reducing the likelihood of additional species being listed;
- C accommodating present water diversions and power production and optimizing opportunities for future water and power development, to the extent consistent with the law; and
- C providing the basis for incidental take authorizations.

The LCR MSCP permit applicants have applied to the Service for an incidental take permit, pursuant to section 10(a)(1)(B) of the Endangered Species Act (Act). The permit application is for six listed species, two candidate species, and 19 unlisted species that may become listed under the Act in the future.

The proposed activities to be covered by the permit are the present and future activities of non-Federal entities within the States of Arizona, California, and Nevada, including primarily those that involve the consumption of water and power resources of the lower Colorado River (LCR).

In addition to the covered activities of the non-Federal LCR MSCP permit applicants, specific present and potential future actions of six Federal agencies on the LCR are also included in the

Plan for the LCR MSCP.

³ Compliance with CEQA, including any actions taken by California parties under the LCR MSCP, is the exclusive responsibility of the relevant California parties.

LCR MSCP.⁴ Those Federal agencies are Reclamation, Bureau of Indian Affairs (BIA), National Park Service (NPS), Bureau of Land Management (BLM), Western Area Power Administration (Western) and the Service. The Federal agencies and permit applicants are collectively referred to as the LCR MSCP participants. The covered actions and activities for the LCR MSCP participants occur along the LCR in La Paz, Mohave, and Yuma counties, Arizona; Imperial, Riverside, and San Bernardino counties, California; and Clark County, Nevada. The requested duration of the permit and the associated formal section 7 consultation for the Federal agencies is 50 years (2005-2055).

The LCR MSCP participants developed the LCR MSCP Habitat Conservation Plan, (LCR MSCP HCP) and the LCR MSCP Biological Assessment (LCR MSCP BA). These documents describe the covered activities, the effects of those activities that may result in incidental take, and the conservation measures that they propose to minimize and mitigate impacts from any incidental take of the covered species.⁵

II. Decision

The purpose of this ROD is to: (1) state our decision, present the rationale for its selection, and portray its implementation; (2) identify the alternatives considered in reaching the decision; and (3) state whether all means to avoid or minimize environmental harm from implementation of the selected alternative have been adopted in accordance with 40 C.F.R. § 1502.2.

This ROD effects the approval of the following Federal actions:

- A. Issuance of an ESA Section 10(a)(1)(B) incidental take permit for the LCR MSCP HCP;
- B. Execution of an Implementation Agreement (IA) for the LCR MSCP;
- C. Execution of a Funding and Management Agreement (FMA) for the LCR MSCP;
- D. Implementation of the LCR MSCP by Reclamation.

The LCR MSCP represents a comprehensive species conservation approach to both federal actions and non-federal activities on the lower Colorado River. This unique conservation partnership includes federal, state and tribal participants. In addition, this program represents a unique partnership among a number of agencies within the U.S. Department of the Interior.

In approving the foregoing identified actions, I also direct all participating agencies within the Department of the Interior to utilize their authorities in furtherance of this conservation program to the fullest extent allowed by law. Rather than undertaking piecemeal, action-by-action ESA compliance activities, the LCR MSCP is designed as a *comprehensive approach* to species conservation; such an approach can work only if the various federal authorities are *themselves*

⁴ As provided in the ESA's implementing regulations, Section 7 and the requirements for ESA consultations apply only to discretionary federal actions. See 50 C.F.R. § 402.03.

⁵ Approval of the LCR MSCP provides ESA compliance for the impacts of certain future covered actions and activities within the Planning Area, but it does not provide approval for the identified future covered actions and activities. Any decisions regarding approval of covered activities, and possible additional environmental review, will be made when a specific covered action or activity is actually proposed in the future. Implementation of the conservation actions contained in the LCR MSCP is not dependent upon approval of any of the identified future potential covered actions and activities.

working together in a coordinated and complementary fashion. Working together, through the implementing structure identified in this Record of Decision (ROD) and the Agreements identified above, it is the direction of the Department that the LCR MSCP is administered through a seamless integration of Departmental authorities and programs during the anticipated 50-year term of LCR MSCP implementation by Reclamation. Throughout the anticipated 50-year term of the LCR MSCP, the Departmental agencies may identify the need for additional intra-Departmental agreements to facilitate implementation of the conservation program. I direct that all participating Departmental officials work together and put in place such agreements to achieve the important species conservation actions identified in this program.

III. Background

A. Law of the River⁶

The Secretary of the Interior is vested with the responsibility to manage the mainstream waters of the LCR pursuant to a body of law commonly referred to as the “Law of the River.” The Law of the River includes, but is not limited to, Federal and state laws, interstate compacts, an international treaty, court decisions, Federal contracts, Federal and state regulations, and multi-party agreements.

The Colorado River Compact of 1922 allocated 7.5 million acre-feet annually to the “upper basin” states (Colorado, Wyoming, Utah, and New Mexico) and 7.5 million acre-feet annually to the “lower basin” states (California, Arizona, and Nevada).⁷ In 1928, Congress passed the Boulder Canyon Project Act, approving the Colorado River Compact and authorizing construction of the Hoover Dam. Hoover Dam was completed in 1935. Over the following fifteen years, two more major dams, four major irrigation canals, and several smaller facilities were constructed.

In 1944, the federal government signed a treaty with Mexico allotting that country 1.5 million acre-feet of water per year from the Colorado River (absent a Treaty-based surplus of up to 1.7 million acre-feet or a Treaty-based reduction due to extraordinary drought or serious accident) and allocating to Mexico any other waters arriving at Mexican points of diversion or at the Southerly International Boundary (SIB) between the two countries.⁸ Mexico then built and completed in 1950 the Morelos Diversion Dam near the intersecting boundaries of Arizona, California, and Baja California to divert its water for use in the Mexicali and San Luis Valleys.

In order to resolve continuing disputes over the apportionment of water among the lower basin states, Arizona filed suit in 1952. After a decade of litigation, the Supreme Court upheld the validity of contracts entered into by the Secretary of the Interior pursuant to the Boulder Canyon

⁶ This discussion regarding the “Law of the River” is included to provide a background understanding and context for the management of the Colorado River and to describe actions taken by the Secretary of the Interior, certain of which are covered actions as part of the LCR MSCP. Relevant provisions of the “Law of the River” affect the rights of the United States, the Republic of Mexico, the seven Colorado River Basin States and various entities within each of the Basin States; accordingly it would be inappropriate for this ROD to provide a formal legal interpretation of any of these provisions of law. Therefore, nothing in the ROD is intended to interpret the provisions of the Colorado River Compact, the Boulder Canyon Project Act of 1928, the U.S.-Mexico Treaty of 1944, the decision of the Supreme Court in *Arizona v. California*, or other provisions of the Law of the River cited herein.

⁷ Colorado River Compact of 1922, Art. III(a).

⁸ Treaty Between the United States of America & Mexico, Art. 10(b), 15(e).

Project Act,⁹ affirmed that the Secretary is, by statute, bound by the Colorado River Compact, and enjoined the federal government from releasing water (other than that needed to satisfy the Mexican Treaty) except in accordance with the order of priority established by Congress: (1) river regulation, improvement of navigation, and flood control; (2) irrigation and domestic uses; and (3) power.¹⁰ The injunction also affirmed Congress' statutory apportionment of mainstream waters among the three lower basin states.

Reclamation, which built and/or operates all of the American dams in the lower basin and conducts river operations for the Secretary, is responsible for delivering water to the lower basin states and to Mexico in accordance with the Compact, the Treaty, the Supreme Court injunction, and contracts with recipients.

ESA Listings and Consultations on the Lower Colorado River: 1967-2005

In 1967, the Yuma clapper rail, an endemic bird of the LCR, was listed as endangered under the precursor law to the ESA. In 1980, the bonytail, a native fish of the LCR, was listed as endangered under the ESA. In 1991, the razorback sucker, another native fish of the LCR, was listed as endangered. In 1994, areas of the LCR were designated as critical habitat for these two endangered fish species. In 1995, the southwestern willow flycatcher, a native bird of the LCR region, was also listed as endangered.

Reclamation began consulting with the Service on new projects in the early 1980s. Until 1995, however, it had not evaluated the impacts of its routine, ongoing operations on listed species and critical habitats along the LCR. In that year, Reclamation began an evaluation of its ongoing operations and actively engaged in negotiations with the three lower basin states and other interested parties regarding development of a comprehensive, long-term LCR MSCP. Representatives of the States of Arizona, California and Nevada (and entities which rely on the Colorado River for water and power) sought to participate in a program through which federal and non-federal participants could develop a comprehensive species conservation strategy to address current and future operations which could be effectively implemented in the lower Colorado River region.

Reclamation entered into formal consultation with the Service in 1996 on discretionary operations and maintenance activities on the LCR. The Service issued a Biological Opinion (BO) in 1997 that covered Reclamation activities for a five-year period. The BO found that the Reclamation actions were likely to jeopardize the continued existence of the southwestern willow flycatcher, bonytail, and razorback sucker, and would destroy or adversely modify designated critical habitat for the bonytail and razorback sucker. The BO contained several Reasonable and Prudent Alternatives (RPAs) designed to provide a multi-phased approach to address the adverse effects.

In 1997, representatives of the Department of the Interior and the States of Arizona, California and Nevada entered formal agreements for development and cost-sharing of the LCR MSCP (see discussion below). Included in the RPAs contained in the 1997 BO issued by the Service was a requirement for the continued development of the long-term LCR MSCP.

Environmental groups filed suit in 1997 alleging that the multi-phased RPA violated the ESA.

⁹ *Arizona v. California*, 373 U.S. 546, 83 S.Ct. 1468, 10 L.Ed.2d 542 (1963).

¹⁰ *Arizona v. California*, 376 U.S. 340, 341-42, 84 S.Ct. 755, 11 L.Ed.2d 757 (1964).

The U.S. District court upheld the Service's decision to require the development of a long-term LCR MSCP as part of the RPA, finding it a reasonable approach to the complex ESA issues along the LCR. The court stated that the RPA "contemplates the initiation of long-term planning to protect the Flycatcher and other endangered species and their habitat along the LCR."¹¹ The court further noted that the "RPA addresses many of the threats facing the Flycatcher over the entire course of the LCR and its range in the short-term... until long-term solutions can be put in place."¹² On appeal, the Ninth Circuit affirmed the district court's holding, noting that there was a rational connection between the facts found in the BO and the choice made to adopt the multi-phased RPA.¹³ As discussed more fully below, the federal and non-federal participants have worked continuously since 1997 to develop the LCR MSCP.

In 2000, environmental groups filed suit to challenge the decision in the section 7 consultation not to address the effects to species in Mexico resulting from river operations. The district court for the District of Columbia held that Reclamation does not have a duty to consult on effects to extra-territorial species in Mexico that are downstream from river flows over which Reclamation has no discretionary control. The court stated "[t]he formulas established by the Law of the River strictly limit Reclamation's authority to release additional waters to Mexico, and Section 7(a)(2) of the ESA does not loosen those limitations or expand Reclamation's authority."¹⁴ The court further noted that "it seems unlikely that any case will present facts that more clearly make any agency's actions non-discretionary than this one: a Supreme Court injunction, an international treaty, federal statutes, and contracts between the government and water users that account for every acre foot of lower Colorado River water."¹⁵

In 2002, Reclamation requested a 3-year extension (to April 30, 2005) of the 1997 consultation, due to the fact that the LCR MSCP was not yet completed. The Service issued a BO based on the 1997 BO for Reclamation's discretionary operations and maintenance activities that would provide section 7 compliance for Reclamation through April 30, 2005 and allow additional time for completion of the LCR MSCP. Based on updated wildlife studies and on some of the positive effects of Reclamation's ongoing conservation efforts, the Service's April 2005 BO concluded that Reclamation's operations would not be likely to jeopardize the continued existence of listed species or adversely modify designated critical habitat.

During the 1997 - 2005 period, Reclamation funded and undertook activities pursuant to its ESA consultations on the lower Colorado River. A summary of some of the key activities undertaken during this period include the following:

- Reclamation conducted restoration activities including identifying restoration concepts opportunities along the LCR, and conducting numerous *in situ* studies using various planting methods for large scale restoration. These studies included all aspects of restoration such as monitoring water application and use, survival and growth success, plant genetics, and other pertinent items. Several restoration demonstration areas have

¹¹ *Southwest Center for Biological Diversity v. Reclamation*, 6 F. Supp.2d 1119 (D.Ariz. 1997).

¹² *Id.* at 1132.

¹³ *Southwest Center for Biological Diversity v. Reclamation*, 143 F.3d 515, 523 (9th Cir. 1998).

¹⁴ *Defenders of Wildlife v. Norton*, 257 F. Supp.2d 53, 67-68 (D.D.C. 2003).

¹⁵ *Id.* at 69.

been initiated, and are being monitored for vegetation success and bird and mammal use.

- A total of 1400 acres of Southwestern Willow Flycatcher habitat was acquired or protected in the Southwest. Protective management actions for the existing Southwestern Willow Flycatcher habitat along the LCR including fire management, Brown-Headed Cowbird trapping efforts, documenting threats to nesting habitat and other protective management actions were taken (and are continuing).
- Numerous studies and surveys were conducted and are continuing to determine various aspects of the status and ecology of the Southwestern Willow Flycatcher occurring along the LCR. These studies and surveys included documenting distribution, nesting locations, nesting habitat characteristics, food habits, as well as interactions with Brown-Headed Cowbirds and predation.
- Reclamation participated in various monitoring activities for avian species such as maintaining MAPS stations (Monitoring Avian Productivity and Survival), conducting winter bird counts, and participating in other avian related surveys.
- Other species specific monitoring conducted since 1997 include mammal surveys for bats, Yuma Cotton Rat, and small mammal use of restoration sites.
- Reclamation upgraded fish rearing facilities at FWS and Arizona hatcheries for production of razorback sucker and bonytail. Fifty thousand sub-adult razorback suckers were stocked below Parker Dam during this period. Studies on movements of razorback sucker, bonytail and flannelmouth sucker were also conducted during this period. Research was initiated (and continues) on the razorback sucker population in Lake Mead to determine why limited recruitment occurs in that population.
- Slightly over 300 acres of impoundments for protected habitats for native fish were identified. Work is continuing to reclaim those impoundments and place native fish in them. The Reclamation actions included determining best methods for excluding non-native fish, actions such as replacing water in large isolated backwaters with higher quality groundwater, determining the sizes of fish eggs and larvae to determine screen sizes, and developing proper methodology for removing all non-native fish prior to stocking with native fish.
- Reclamation continued to serve as the lead agency in the Lake Mohave Native Fishes Program, which has the goal of replacing the existing population of aging razorback suckers with 50,000 spawning adult razorback suckers. The program has stocked over 80,000 juvenile and sub-adult razorback suckers.
- Research was conducted on various aspects of the life history of native LCR fishes. These included distribution and habitat use of non-native fish such as flathead catfish; initiating studies on an isolated habitat on Cibola Refuge that has a self-sustaining population of razorback sucker and bonytail; a literature review, summary and assessment of relative roles of biotic and abiotic factors for management of native fishes in the LCR; as well as cooperating in other native fish activities with other agencies on the LCR.
- Reclamation has also continued to maintain updated vegetation and backwater maps of the LCR and is currently updating the backwater rating system for the LCR.

Development of the LCR MSCP by Representatives of the Federal Government working with Arizona, California and Nevada entities

On August 2, 1995, the United States, through the U.S. Department of the Interior; the Arizona Department of Water Resources and the Arizona Game and Fish Commission; the Colorado River Board of California and the California Department of Fish and Game; and the Colorado River Commission of Nevada, and the Division of Wildlife of the Nevada State Department of Conservation and Natural Resources entered into a Memorandum of Agreement for Development of a Lower Colorado River Multi-Species Conservation Program, which was clarified in a Memorandum of Clarification, signed in June 1996, to acknowledge Federal actions within the 100-year floodplain of the LCR which are subject to section 7 consultation under ESA.

On June 26, 1996, the U.S. Department of the Interior and representatives of the three lower Colorado River basin states of Arizona, California, and Nevada entered into the “Lower Colorado River Multi-Species Conservation Program Agreement” by which they agreed, subject to appropriation, to a sharing between Federal and State parties of the costs of developing the LCR MSCP and implementing certain interim conservation measures during fiscal years 1996 through 1999.

In May of 1997, representatives of the U.S. Department of the Interior (on behalf of the BLM, Reclamation, the Service, BIA, and the NPS) and the three lower Colorado River basin states of Arizona, California, and Nevada entered into the “Lower Colorado River Multi-Species Conservation Program Joint Participation Agreement” to jointly develop a Lower Colorado River Multi-Species Conservation Program and to formally establish the Steering Committee and other organizational structures necessary for the development of the LCR MSCP. At the same time, representatives of the three states also entered into the “Lower Colorado River Multi-Species Conservation Program Inter-State Cost-Sharing Agreement” to provide funding commitments and arrangements with respect to the non-federal portion of the costs of the Program.

To facilitate the development of an ecosystem-based habitat conservation plan (HCP) and coordination with the various LCR MSCP Federal partners, the Director of the Service designated the LCR MSCP Steering Committee as the Ecosystem Conservation, Recovery, and Implementation Team (ECRIT) for the LCR. The potentially affected parties and other interested parties established a public process for developing the required documents and plans. Various public agencies and other nongovernmental groups participated, at their discretion and at various times, in developing the various components of the LCR MSCP.

The LCR MSCP participants determined that the unique factual circumstances on the LCR required that ESA compliance be approached through a combination of both section 7 of the ESA (applicable to federal actions and entities) and section 10 of the ESA (applicable to non-federal activities and entities). The coordinated management of the LCR results from a combination of Federal and non-Federal discretionary and non-discretionary activities, which prevents a separate analysis of the Federal and non-Federal components. Given the combination of Federal actions, both discretionary and non-discretionary, and non-Federal actions carried out in the LCR, absent a comprehensive approach such as that utilized in the development of the LCR MSCP, it is not clear which parties could have specific responsibility under section 9 of the ESA for any potential take of ESA-listed species. To eliminate any uncertainty regarding which method of take authorization, section 7 or section 10, is more appropriate in this situation, the LCR MSCP participants requested that the Service authorize take under both sections 7 and 10

and the Service adopted this approach.

Scientific Peer Review Utilized in Development of LCR MSCP

The LCR MSCP Steering Committee commissioned two separate scientific reviews of interim conservation strategy documents during program development in 1999 and 2002.

The first scientific review was conducted by the American Institute of Biological Sciences (AIBS) from June through October 1999. The key recommendations of the six member panel included:

- C change the approach utilized in the LCR MSCP from a species based approach to a habitat approach. This approach would entail creation of integrated habitat mosaics in areas along the river ranging from aquatic to mesquite communities;
- C Focus on restoration and management of an integrated mosaic of habitat types, including open water, backwater, marsh, riparian, and mesquite habitats;
- C Prioritize development and implementation of the conservation plan based on the following general cornerstone strategies-
 - Restore or rehabilitate natural ecological processes and conditions;
 - Protect, enhance, restore habitat and protect large blocks of habitat;
 - Directly manipulate biotic populations and restore natural biotic communities; and
 - Implement research, monitoring, and adaptive management.

The second scientific peer review was conducted on the draft Conservation Plan between November 5, 2002 and January 21, 2003. The Science Review Team consisted of 6 members selected from a list of 18 active interdisciplinary scientists with a working knowledge of Southwest ecosystems. The Science Review Team's conclusions included:

- C The LCR MSCP technical consultant's approach was correct in preparing the Conservation Plan;
- C Mitigation offered is reasonable and commendable;
- C Data are lacking for nearly all species- therefore there is significant weakness in the supporting science base;
- C Adaptive ecosystem management is the best approach to determining solutions;
- C Front-loading the implementation phase with research and monitoring is needed to gain better insight on species needs and to test habitat restoration concepts before committing to large-scale actions.

The LCR MSCP Steering Committee instructed the technical consultants to incorporate the recommendations of the peer review into the MSCP Conservation Plan, as appropriate.

Completion of LCR MSCP Development: 2004

On April 16, 2004, the Service received the section 10 permit application package from the non-Federal parties. On June 9, 2004, the Service's Arizona Ecological Services Office certified the application package as complete. The public review period for the draft LCR MSCP documents began on June 18, 2004. A 60-day public comment period was provided, and three public hearings were scheduled for July 20, 21, and 22, 2004. Comments received during the public review period were addressed and incorporated as appropriate into the final LCR MSCP documents. The final LCR MSCP HCP, BA, Appendices, and Responses to Comments

documents were issued on the same date as companion documents to the FEIS.¹⁶

Reclamation requested formal section 7 consultation on its identified covered actions on the LCR, implementation of the MSCP Conservation Plan, and the specified actions of the five other Federal agencies on November 26, 2004.

IV. Alternatives Considered

The FEIS was prepared by Reclamation and the Service to address the formulation and evaluation of specific multi-species conservation approaches and to identify the potential environmental effects of implementing such conservation approaches. The alternatives addressed in the FEIS are those Reclamation and the Service determined would meet the purpose of and need for the Federal actions and represented a broad range of the most reasonable alternatives.

The FEIS analyzed three action alternatives as well as a No Action alternative that was developed for comparison of potential effects of the action alternatives. The three action alternatives and the No Action alternative are described below.

1. Proposed Conservation Plan Alternative

The proposed action alternative includes two primary components: 1) implementation of a regional Conservation Plan by Federal and non-Federal participants that would meet the LCR MSCP goals and objectives; 2) issuance of an ESA section 10(a)(1)(B) permit by the Service based on the proposed Conservation Plan for non-Federal covered activities.

The Conservation Plan includes a full range of conservation measures for all covered species. Based on application of the selection criteria, 27 species were proposed as “covered species” under the section 10(a)(1)(B) permit. The LCR MSCP also includes four “evaluation species.” Evaluation species are species that could become listed during the term of the LCR MSCP but for which sufficient information is not currently available to determine their status in the planning area, the potential affects of covered activities, or to develop specific conservation measures for the species. The Conservation Plan includes research studies and pilot management studies for the evaluation species to determine their status in the planning area and to determine appropriate conservation measures.

The Conservation Plan includes the following types of conservation measures that, in combination, would achieve program objectives for regulatory compliance and contribute towards species’ recovery:

- C Maintenance of an important portion of existing habitat for covered species in the planning area;
- C Creation and maintenance of new habitat, including long-term management of created habitat to maintain and preserve ecological functions;
- C Avoidance and minimization of impacts on covered species and their habitat resulting from covered activities and Conservation Plan implementation;
- C Population enhancement measures that directly or indirectly increase abundance of covered species; and
- C Monitoring and research necessary to assess and improve conservation measure

¹⁶ Since 1997, the LCR MSCP participants spent seven years and \$ 8.3 million on MSCP development.

effectiveness and adaptively manage implementation of the Conservation Plan over time.

The Conservation Plan is designed to fully mitigate adverse effects on all covered species resulting from covered actions and activities and to meet the ESA section 10 standard to minimize and mitigate the impacts of the covered activities on covered species to the maximum extent practicable.

This alternative would be implemented in the planning area, which is the historic floodplain of the LCR, from Lake Meade to the SIB between the United States and Mexico and areas with elevations up to and including the full pool elevations of Lake Mead, Lake Mohave, and Lake Havasu.

2. No Action Alternative

The No Action Alternative describes a reasonable assumption of the expected future situation that would result if the Conservation Plan were not implemented as proposed and the section 10(a)(1)(B) permit were not issued. This alternative is based on a number of assumptions regarding the actions that would be taken in the absence of the LCR MSCP. These assumptions include: 1) a comprehensive, multi-species conservation plan would not be implemented by the non-Federal and Federal entities; 2) the Service would not issue a comprehensive section 10(a)(1)(B) permit to the states of Arizona, California, and Nevada for incidental take resulting from the covered activities; 3) the covered activities described in the BA and HCP would likely be implemented, but regulatory compliance would be required and applied on a case-by-case basis as each activity is considered and approved; 4) individual project mitigation programs likely would not provide the regional wildfire suppression and law enforcement funding proposed in the conservation Plan; and 5) coordinated monitoring and adaptive management programs would not be implemented.

3. ESA-Listed Species Only Conservation Plan Alternative

This alternative would provide coverage only for those species listed under the ESA, and it would result in the issuance of a section 10(a)(1)(B) permit by the Service. Covered species would be the Yuma clapper rail, southwestern willow flycatcher, desert tortoise, bonytail, humpback chub, and razorback sucker. This alternative would differ from the proposed action primarily in that no honey mesquite and less cottonwood-willow and marsh land cover would need to be established. Additionally, no take permit would be issued for unlisted species, and specific benefits for those species would not occur. Under this alternative, the Conservation Plan would be implemented in the same geographic area as the proposed action and would include:

- C Establishment of a \$ 25 million fund to support projects that maintain existing habitat for listed species that would be covered by the Conservation Plan under this alternative;
- C Creation of native land cover types in the planning area (4,050 acres of cottonwood-willow, 382 acres of marsh, and 360 acres of backwaters) to provide covered species habitats;
- C Long-term management of established habitat to maintain and preserve ecological functions;¹⁷

¹⁷ Nothing in this Record of Decision or the agreement approved by this Record of Decision, modifies, in any manner, any applicable obligation to seek the approval of the appropriate Federal land manager prior to taking any action associated with implementation of the Conservation Plan on Federal lands.

- C Avoidance and minimization of impacts resulting from covered activities and Conservation Plan implementation on listed species and their habitat;
- C Population enhancement measures intended to directly or indirectly increase abundance of listed species;
- C Adaptive management measures, including monitoring and research necessary to assess and improve conservation measure effectiveness; and
- C Other conservation measures relating to the listed species and the strategies for implementing them.

4. Off-Site Conservation Plan Alternative

The off-site conservation plan alternative would involve the application for and issuance of a section 10(a)(1)(B) permit for the same covered activities and covered species as the proposed action. The level of impacts to covered species, including the amount of take authorization that is requested, is the same for this alternative as for the proposed action, and therefore, the same level of conservation measures would be established to mitigate the impacts, including:

- C Establishment of a \$ 25 million fund to support projects that maintain existing habitat for listed species that would be covered by the Conservation Plan under this alternative;
- C Long-term management of established habitat to maintain and preserve ecological functions;
- C Avoidance and minimization of impacts resulting from covered activities and Conservation Plan implementation on listed species and their habitat;
- C Population enhancement measures intended to directly or indirectly increase abundance of listed species;
- C Adaptive management measures, including monitoring and research necessary to assess and improve conservation measure effectiveness; and
- C Other conservation measures relating to the listed species and the strategies for implementing them.

The primary difference between this alternative and the proposed action is that conservation areas generally would be created along tributaries to the LCR. Fish conservation, including the creation of 360 acres of backwaters and fish augmentation strategies, would continue to take place in the mainstem, reservoirs, and backwaters of the LCR. For purposes of analysis, it is assumed that created land cover types would be distributed equally between the three off-site conservation areas.

Potential off-site locations for implementing the Conservation Plan elements are: (1) the lower reaches of the Muddy River/Moapa Valley and Virgin River, proceeding upstream from the confluences with Lake Meade and overlapping the Nevada Department of Wildlife's Overton Wildlife Management Area; (2) the lower reach of the Bill Williams River, proceeding upstream from the confluence with the LCR and overlapping the Bill Williams River National Wildlife Refuge, to Alamo Dam; and 3) lower Gila River Valley, proceeding upstream from the LCR planning area and extending approximately ten miles east of Mohawk Valley.

V. Basis for Decision

Reclamation and the Service selected the Proposed Conservation Plan Alternative combined with the off-site mitigation option in Alternative 4 as the preferred alternative based on the determination that it best meets all aspects of the purpose and need for the action. The selected

alternative is the environmentally preferable alternative because it surpasses other alternatives in realizing the full range of environmental goals, including contributions to the recovery of species covered by the LCR MSCP. This alternative will effectively conserve species while allowing the use of water under existing entitlements. Based on all available information, the preferred alternative provides the greatest benefit for the covered species, and has been designated as the most reasonable and feasible alternative. The No Action Alternative was not selected because it would not provide the level of conservation to the covered species on the LCR, as there would not be a coordinated conservation plan put into place. The ESA Listed Species Only Alternative was not selected because it did not adequately provide future certainty for the covered actions and activities regarding conservation needs for species not currently listed under the ESA.

Measures to avoid, minimize, and mitigate to the greatest practicable extent the environmental effects that could result from the implementation of the selected alternative have been incorporated into the decision.

In order for the Service to issue a section 10(a)(1)(B) permit, the LCR MSCP HCP must meet the criteria set forth in 16 U.S.C. § 1539(a)(2)(A) and (B). Criteria for this statutory provision and how the LCR MSCP HCP satisfies these criteria are summarized below.

A. The taking of the affected species will be incidental to otherwise lawful activities.

Any take of the affected species will be incidental to the otherwise lawful implementation of the covered activities and the conservation measures, as specified in detail in the LCR MSCP HCP and in the biological and conference opinion. Any incidental taking of listed species for research or other conservation purposes will be covered under separate section 10(a)(1)(A) permits.

B. The applicants will, to the maximum extent practicable, avoid, minimize, and mitigate the impacts of taking the affected species.

The LCR MSCP HCP contains measures, as summarized in this ROD, to minimize and mitigate, to the maximum extent practicable, the impacts of take of the covered species under the permit and the incidental take statement of the biological and conference opinion for the Federal actions.¹⁸ The Service interprets the “maximum extent practicable” standard to require that the level of mitigation must be rationally related to the level of take identified under the plan. The mitigation also must be reasonably capable of being accomplished.¹⁹ The level of mitigation provided by the LCR MSCP more than compensates for the impacts of the take that is authorized under the MSCP. The LCR MSCP provides a comprehensive conservation program that will expend \$ 626 million (in 2003 dollars, indexed annually as provided in the Funding and Management Agreement)²⁰ over the 50 year term of the Program on the conservation of covered

¹⁸ Due to the difficulty in teasing apart the Section 7 and Section 10 components of the LCR MSCP, the Service elected to evaluate the entire program using the section 10 standards, which are perceived to have a more rigorous standard regarding measures to offset incidental take. Thus, the MSCP as a whole, including both federal and non-federal components, has been found by the Service to meet the standards of section 10, including the requirement that minimization and mitigation be to the maximum extent practicable.

¹⁹ See *National Wildlife Federation v. Norton*, 306 F. Supp.2d 920, 928, n. 12 (E.D. Cal. 2004).

²⁰ No reference or description to the Program Documents contained in this Record of Decision modifies in any manner the provisions contained in the Funding and Management Agreement, the Implementation Agreement or any of the other Program Documents.

species along the LCR and conserve approximately 8,132 acres of habitat for covered species.

In addition to the avoidance, minimization, and mitigation components of the HCP that support a determination that the HCP does mitigate to the maximum extent practicable, the HCP includes additional conservation measures that contribute to the recovery or stabilization of most of the covered species. These measures include:

1. conservation of more acres of habitat than required for full mitigation of habitat lost²¹;
2. species-specific research on other threats that identifies actions that will be taken if those threats are significant. An example is MRM 3 for research on the effects of nest site competition with starlings for the cavity nesting covered bird species;
3. contributions to ongoing conservation programs that enhance the ability of such programs to evaluate or implement other conservation opportunities; and
4. coordination with present and future recovery efforts for listed species through evaluation of conservation actions (such as habitat creation technologies, monitoring of stocked fish survival and habitat use, and evaluation of selenium transit through river management activities).

C. The applicants will ensure that adequate funding for the plan will be provided.

The IA and FMA for the LCR MSCP describe the full level of funding to implement all facets of the LCR MSCP HCP. The total cost of the Program is estimated at \$626,180,000 over the 50 year term of the Program (in 2003 dollars, subject to yearly adjustments for inflation), with 50 percent of the costs borne by the permit applicants and 50 percent borne by the U.S. government, pursuant to annual appropriations, as represented by Reclamation. Information used to estimate the total cost of implementing the LCR MSCP HCP is found in Appendix N in Volume IV of the final LCR MSCP documents and in Chapter 7 of the final LCR MSCP HCP. The final IA and FMA document the agreed-upon cost share. These documents are herein incorporated by reference. Further evidence that causes the FWS to believe that the permit applicants will ensure adequate funding for the LCR MSCP includes:

1. letters dated August 17, 2004 from the states of Arizona, California, and Nevada to the Secretary of the Interior agreeing to fund the LCR MSCP for its full 50-year term;
2. the fact that the permit applicants who have agreed to fund the LCR MSCP have a consistent fiscal track record. Non-Federal parties have participated in the LCR MSCP for 10 years at an approximate cost of 4 million dollars;
3. the IA and FMA provide written funding assurances by the non-Federal parties²²;
4. the LCR MSCP is jointly funded by multiple contributors from the three states, rather than by a single contributor; and
5. the states are currently finalizing intra-state funding arrangements, which will provide each contributor with specific responsibilities for an amount of their contribution. These agreements will be ratified by the boards or other relevant authorities prior to the permit being issued.

²¹ In addition, all of the conservation measures identified in the MSCP will be implemented even if some of the covered activities are not proposed or implemented during the 50-year term of the MSCP.

²² The applicants' compliance with the Funding and Management Agreement will ensure that adequate funding for the HCP will be provided.

The Service's No Surprises assurances are discussed in the section 10(a)(1)(B) permit for the LCR MSCP, and measures to address changed and unforeseen circumstances have also been identified in the LCR MSCP HCP.

- D. The taking will not appreciably reduce the likelihood that the species will survive and recover in the wild.

The ESA's legislative history establishes the intent of Congress that issuance criteria be based on a finding of "not likely to jeopardize" a species' continued existence and "not likely to destroy or adversely modify" designated critical habitat under section 7(a)(2) [see 50 CFR 402.02]. In addition, because proposed critical habitat for the southwestern willow flycatcher is present in the LCR MSCP action area, and 21 unlisted species that were proposed for inclusion as covered species for which incidental take authority will be permitted upon listing, we must also consider the requirements of formal conference to make determinations on likelihood of jeopardy for these unlisted species as if they were proposed to be listed as threatened or endangered, or adverse modification of proposed critical habitat. In the biological and conference opinion, we concluded that the issuance of the incidental take permit to the Applicants and the actions of Federal agencies described in the LCR MSCP BA will not likely jeopardize the continued existence of the listed species and 20 of the unlisted species.

Designated and proposed critical habitat will not likely be destroyed or adversely modified.

- E. Other measures, as required by the Director of the Service, have been met.

The LCR MSCP HCP and proposed permit terms and conditions incorporate all elements that we have determined to be necessary for approval of the LCR MSCP HCP and issuance of the permit.

The Service also reviewed the general permit criteria and conditions set forth in 50 C.F.R. § 13.21(b)-(c) and determined that the applicants have met the criteria for the issuance of the permit and do not have any disqualifying factors that would prevent the permit from being issued.

VI. Public Response to Final Environmental Impact Statement

Two comment letters were received on the FEIS subsequent to publication of the FEIS on December 17, 2004. These comment letters did not contain any new issues that had not been previously analyzed in the Program documents, including the FEIS, and its accompanying documentation.²³

VII. Alteration of Project Plan in Response to Public Comment

Public comments on the FEIS did not result in changes to the proposed action nor selection of the Preferred Alternative.

²³ Letters were received from the U.S. Environmental Protection Agency (Region IX), dated January 19, 2005 ("EPA is pleased that the issues identified in our review of the DEIS have been addressed in the FEIS"), and from Mr. Jurg Heuberger of the the Planning/Building Department of Imperial County, dated January 24, 2005 (commenting on the content of the responses to comments found in Volume V of the FEIS, and stating that that "the County forward [sic] to participating in the development and the implementation activities of the LCR MSCP with the Bureau and all the other participating agencies.").

VIII. Environmental Impacts and Environmental Commitments

Potential impacts to 19 resources from implementation of the Preferred Alternative were analyzed in the FEIS. Of the 19 resources evaluated, it was determined for 14 of these resources that the proposed action would have less than significant impacts. For these 14 resource areas, mitigation measures were determined not to be necessary and none are proposed. These 14 resources included: Aesthetics; Energy and Depletable Resources; Hazards and Hazardous Materials; Hydrology and Water Quality; Indian Trust Assets; Land Use; Noise; Population and Housing; Public Utilities and Services; Recreation; Socioeconomics; Topography, Geology, Soils, and Mineral Resources; Transboundary Impacts; and Transportation.

For three resources, Agricultural Resources, Biological Resources, and Cultural Resources, it was determined that the proposed action would have potentially significant effects on the resources, but that these effects could be mitigated to less than significant through the implementation of mitigation measures. The mitigation measures adopted for these three resources to reduce the effects to less than significant are set forth in Section 3 of the FEIS.

For Air Quality and Environmental Justice, it was determined that the proposed action could have potentially significant effects and that these effects might remain potentially significant despite the mitigation measures adopted. However, the effects are being minimized and mitigated to the maximum extent practicable. The mitigation measures are set forth in Section 3 of the FEIS.

IX. Implementing the Decision

LCR MSCP Participants

Permittees covered by the section 10(a)(1)(B) permit include:

Arizona: The Arizona Department of Water Resources; Arizona Electric Power Cooperative Inc.; Arizona Game and Fish Commission; Arizona Power Authority; Central Arizona Water Conservation District; Cibola Valley Irrigation and Drainage District; City of Bullhead City; City of Lake Havasu City; City of Mesa; City of Somerton; City of Yuma; Electrical District No. 3, Pinal County, Arizona; Golden Shores Water Conservation District; Mohave County Water Authority; Mohave Valley Irrigation and Drainage District; Salt River Project Agricultural Improvement and Power District; Town of Fredonia; Town of Thatcher; Town of Wickenburg; Unit "B" Irrigation and Drainage District; Wellton-Mohawk Irrigation and Drainage District; Yuma County Water Users' Association; Yuma Irrigation District; Yuma Mesa Irrigation and Drainage District.

California: The City of Needles, the Coachella Valley Water District, the Colorado River Board of California, the Imperial Irrigation District, the Los Angeles Department of Water and Power, the Palo Verde Irrigation District, the San Diego County Water Authority, the Southern California Edison Company, the Southern California Public Power Authority, Bard Water District, and The Metropolitan Water District of Southern California.

Nevada: The Colorado River Commission of Nevada, the Nevada Department of Wildlife, Basic Water Company, and the Southern Nevada Water Authority.

Federal agencies participating in the LCR MSCP, and receiving ESA compliance through

section 7 consultation instead of section 10 are:

Reclamation, the Service, NPS, BIA, BLM, and Western.

Covered Actions and Activities

The covered activities of the six Federal agencies are set forth in Chapter 2 of the LCR MSCP BA and are summarized as follows:

Reclamation's ongoing and future actions include water operations, hydropower production, channel maintenance, flood control, and implementation of the LCR MSCP. Western's covered actions include its role in hydropower generation. The NPS's covered actions include riparian habitat restoration, fishery management, and boating access. The BIA's covered actions include irrigation system operation and maintenance, water conservation practices, riparian habitat restoration, wildland fire management, recreation facilities development, and farmland development. The Service and BLM's covered actions are their diversion and return flows of their LCR water allocations.

The covered activities of the non-federal parties are set forth in Chapter 2 of the LCR MSCP HCP and include, principally, diverting water and contracting for hydropower.

Covered Species

The covered actions and covered activities addressed in the LCR MSCP may affect the following federally listed, candidate, and nonlisted species, and these species constitute Covered Species under the LCR MSCP²⁴:

Yuma clapper rail (*Rallus longirostris yumanensis*)
Southwestern willow flycatcher (*Empidonax traillii extimus*)
Desert tortoise (*Gopherus agassizii*)
Bonytail (*Gila elegans*)
Humpback chub (*Gila cypha*)
Razorback sucker (*Xyrauchen texanus*)
Yellow-billed cuckoo (*Coccyzus americanus occidentalis*)
Relict leopard frog (*Rana onca*)
Western red bat (*Lasiurus blossevillii*)
Western yellow bat (*Lasiurus xanthinus*)
Colorado River cotton rat (*Sigmodon arizonae plenus*)
Yuma hispid cotton rat (*Sigmodon hispidus eremicus*)
Western least bittern (*Ixobrychus exilis hesperis*)
California black rail (*Laterallus jamaicensis corturniculus*)
Elf owl (*Micrathene whitneyi*)
Gilded flicker (*Colaptes chrysoides*)
Gila woodpecker (*Melanerpes uropygialis*)
Vermilion flycatcher (*Pyrocephalus rubinus*)

²⁴ The list of covered species does not contain the desert pocket mouse, which was included in the LCR MSCP HCP and permit application. The Service determined there was insufficient information on this species to support including it in the section 10(a)(1)(B) permit, and recommended to the LCR MSCP participants that it be considered an evaluation species.

Arizona Bell's vireo (*Vireo bellii arizonae*)
Sonoran yellow warbler (*Dendroica petechia sonorana*)
Summer tanager (*Piranga rubra*)
Flat-tailed horned lizard (*Phrynosoma mcalli*)
Flannelmouth sucker (*Catostomus latipinnis*)
MacNeill's sootywing skipper (*Pholisora graciellae*)
Sticky buckwheat (*Eriogonum viscidulum*)
Threecorner milkvetch (*Astragalus geyeri* var *triquetrus*)

The full implementation of the LCR MSCP HCP is a condition of the incidental take permit. Chapter 5 of the LCR MSCP HCP, and Chapter 3 of the EIS/EIR describe the conservation measures and results of their implementation in detail; pertinent information is summarized below.

Mitigation

The LCR MSCP HCP describes the measures to minimize and mitigate adverse effects of any expected incidental take. The LCR MSCP permittees and Reclamation are committed to implementing the LCR MSCP HCP, including all conservation measures. All conservation measures are terms and conditions of the incidental take permit and incidental take statement contained in the biological and conference opinion for the LCR MSCP.

The conservation measures in the LCR MSCP HCP are briefly summarized below.

- C Establishment of 5,940 acres of cottonwood-willow habitat suitable for the covered species that use this habitat type in amounts described in Table 2-55 of the BA and Table 5-5 of the HCP.
- C Establishment of 1,320 acres of honey mesquite type III habitat (defined in section 3.3.1 of the HCP) suitable for the covered species that use this habitat type in amounts described in Table 2-55 of the BA and Table 5-5 of the HCP.
- C Establishment of 512 acres of cattail (*Typha domingensis*)/bulrush (*Scirpus* spp.) marsh habitat for the covered species that use this habitat type in amounts described in Table 2-55 of the BA and Table 5-5 of the HCP.
- C Establishment of 360 acres of backwaters for the covered species that use this habitat type in amounts described in Table 2-55 of the BA and Table 5-5 of the HCP.
- C Perpetual maintenance of habitat created to replace that lost to "footprint" (non-flow related) impacts. The remaining habitat acreage will be maintained for at least the 50-year period covered by the permit and consultation. Created habitat lost to fire, drought, or flood will be restored to suitable condition or replaced elsewhere to ensure the total acreage of habitat is provided for the term of the LCR MSCP.
- C Contributions to river-wide fire protection efforts by other Federal and state agencies.
- C Planning process to select suitable sites for habitat restoration described.
- C Augmentation of existing populations of razorback sucker in the LCR MSCP planning area to enhance these populations and provide for subsequent research and management programs.
- C Augmentation of existing populations of bonytail and expansion of occupied area in the LCR MSCP planning areas to enhance existing populations and establish a new population and provide for subsequent research and management programs.
- C Provision of \$500,000 to the Glen Canyon Dam Adaptive Management Work

Group to support unfunded conservation needs of the humpback chub.

C Provision of \$400,000 for conservation measures in support of the flannelmouth sucker in the LCR.

C Provision of \$10,000 per year for 10 years to support planned, but unfunded, conservation actions to contribute to the recovery of the relict leopard frog.

C Provision of \$10,000 per year until 2030 (25 years of funding) to the Clark County Multi-Species Habitat Conservation Plan Rare Plant Workgroup to support unfunded conservation measures in support of the sticky buckwheat and threecorner milkvetch.

C Directed research into covered and evaluation species and their habitats, management actions and restoration technology for habitat restoration, and monitoring of species and their habitats.

C Establishment of a \$25 million dollar fund to support maintenance actions for existing covered species habitats on the LCR.

C Provision for specific avoidance and minimization measures to reduce the potential for take of covered species, and specific mitigation measures to offset take that has occurred. There are both general and species-specific measures included. In addition, there are monitoring and research measures that provide information on the species, their distribution, and habitat use to provide focus for the development of habitats. The general measures are listed below and are detailed in Chapter 5 of the HCP:

1. Avoidance and Minimization Measure (AMM) 1: To the extent practicable, avoid and minimize impacts of implementing the LCR MSCP (Conservation Plan) on existing covered species habitats.
2. AMM 2: Avoid impacts of flow-related covered activities on covered species habitats at Topock Marsh.
3. AMM 3: To the extent practicable, avoid and minimize disturbance of covered bird species during the breeding season.
4. AMM 4: Minimize contaminant loads in runoff and return irrigation flows from LCR MSCP-created habitats to the LCR.
5. AMM 5: Avoid impacts of operation, maintenance, and replacement of hydroelectric generation and transmission facilities on covered species in the LCR MSCP planning area.
6. AMM 6: Avoid or minimize impacts on covered species habitats during dredging, bank stabilization activities, and other river-management actions.
7. Monitoring and Research Measure (MRM) 1: Conduct surveys and research to better identify covered and evaluation species' habitat requirements.
8. MRM 2: Monitor and adaptively manage created covered species and evaluation species habitats.
9. MRM 3: Conduct research to determine and address the effects of nest-site competition with European starlings on reproduction of covered species.
10. MRM 4: Conduct research to determine and address the effects of brown-headed cowbird nest parasitism on reproduction of covered species.
11. MRM 5: Evaluate selenium in created backwaters and marshes and evaluate effects of releasing selenium through dredging activities.
12. Conservation Area Management Measure (CMM) 1: Reduce risk of loss of created habitat to wildfire.
13. CMM 2: Replace created habitat affected by wildfire.

Monitoring

The Service will monitor compliance with the terms and conditions of the permit and the incidental take statement. The LCR MSCP HCP contains a comprehensive monitoring program that will assess the effectiveness of minimization and mitigation measures throughout the 50-year term of the permit and section 7 consultation with the Federal agencies. The goal of the monitoring program is to provide information and data necessary to assess compliance, to verify progress toward achievement of the biological goals for the species, and adapt management in accordance with monitoring results. Specific phases of the monitoring program are:

1. System monitoring: collect data on existing populations of covered species and their habitats to identify data gaps and research questions that relate to the successful implementation of the conservation plan.
2. Species research: based on the results of system monitoring, targeted species research will be identified and implemented to ensure the success of the habitat-creation components of the conservation plan.
3. Restoration research: identify effective technologies and practices to create the habitats for the covered species.
4. Post-development monitoring: once habitats are created, evaluate the progress toward suitable habitat for the covered species, and document the use of the created habitats by covered species, to define success of the conservation plan.

Section 5.11 of the LCR MSCP HCP describes the monitoring program and section 5.12 describes how the results from the monitoring program will be incorporated into adaptive management strategies to provide for effective implementation of the conservation plan.

Implementation

Management of the LCR MSCP and implementation of the Conservation Plan identified in the Permit and the Biological Opinion shall be the responsibility of Reclamation, which, in consultation with the Steering Committee, will employ a person who shall be designated the Program Manager of the LCR MSCP. Reclamation will cooperate with and coordinate its management and implementation activities for the LCR MSCP with the Service and the other Members of the Steering Committee.

The Regional Director of the Lower Colorado Region of Reclamation (Regional Director), in consultation with the Steering Committee, will appoint a Program Manager, who shall be responsible for operation, management, and implementation of the provisions, terms, and conditions of the Conservation Measures. The Program Manager shall be under the supervision of the Regional Director for Reclamation's Lower Colorado Region and will have an office located within Arizona, California, or Nevada.

The Program Manager will take appropriate action to implement the Conservation Plan and Conservation Measures and obligations set forth in this Agreement, consistent with the provisions of the Program Documents, including but not limited to the following:

- C Administer and implement the LCR MSCP in a manner that complies with the requirements of the ESA, other applicable Federal and state laws, and the Program Documents.
- C Direct the preparation of Program implementation schedules and cost estimates, an annual Program Implementation Work Plan and Budget and periodic Contribution payment schedules, and, as necessary, direct the preparation of any changes to these documents.
- C Establish one or more Program Accounts, as deemed necessary and appropriate,

for the administration of funds from any Contributor or other participant in the LCR MSCP.

- C Review and discuss with, and attempt to seek a consensus among, Members of the Steering Committee and its subcommittees and work groups and attempt to resolve any Dispute in accordance with the FMA.

The Steering Committee formed for MSCP development will be replaced by a new Lower Colorado River Multi-Species Conservation Program Steering Committee whose initial Members have been divided into seven Participant Groups and are identified as follows:

1. The Federal Participant Group:
 - Bureau of Reclamation
 - Fish and Wildlife Service
 - National Park Service
 - Bureau of Land Management
 - Bureau of Indian Affairs
 - Western Area Power Administration
2. The Arizona Participant Group:
 - All Arizona LCR MSCP section 10(a)(1)(B) permit holders.
3. The California Participant Group:
 - All California LCR MSCP section 10(a)(1)(B) permit holders.
4. The Nevada Participant Group:
 - All Nevada LCR MSCP section 10(a)(1)(B) permit holders.
5. The Native American Participant Group:
 - (Note: Participant Group will be contacted to determine interest in being a member.)
6. The Conservation Participant Group:
 - (Note: Participant Group will be contacted to determine interest in being a member.)
7. The Other Interested Parties Participant Group:
 - (Note: Participant Group will be contacted to determine interest in being a member.)

The Steering Committee shall continue to be designated by the Director of the Service as the ECRIT for the LCR.

The Steering Committee will meet at least once in each calendar year and at such other times as called by the Chair or the Program Manager or as otherwise provided in the by-laws. The Steering Committee will work with the Program Manager to coordinate implementation of the LCR MSCP.

The Steering Committee may create standing or ad hoc subcommittees or work groups as it deems necessary to carry out its responsibilities under the Program Documents. Except with respect to designating subcommittees and work groups, and except as otherwise provided in this Agreement, the Steering Committee will have no decision-making authority with respect to the management and administration of the LCR MSCP.

Each meeting of the Steering Committee must be open to the public, and any person attending a Steering Committee meeting may file a written statement, or provide reasonable and timely oral input regarding topics on the meeting agenda. The Steering Committee will develop appropriate procedures to provide public notice of Steering Committee or subcommittee meetings.

The Steering Committee will review certain matters presented by the Program Manager. Prior to taking any action with respect to the following types of matters, the Program Manager shall first present the proposed action to the Steering Committee for its consideration:

- C Annual Implementation Report, Work Plan, and Budget and Contribution payment schedules related to the Program.
- C Additional or modified Conservation Measures proposed pursuant to the Adaptive Management Program.
- C Land and water acquisitions.
- C Reports and responses to Congress and Federal and state regulatory agencies concerning the Program, where practicable.

Annually, during the term of this Agreement, the Program Manager shall develop and present to the Steering Committee a Program Implementation Report, Work Plan, and Budget consistent with the Program Documents. The Implementation Report, Work Plan, and Budget shall include:

- C A current financial report.
- C A description of all Conservation Measures initiated, continued, or completed during the previous year.
- C A description of all Conservation Measures intended to be initiated or continued during the next three-year period.
- C The purpose for, and the cost estimate of, all Conservation Measures intended to be initiated or continued during the next three year period.
- C A running tabulation and description of all Conservation Measures which have been completed from the commencement of the LCR MSCP to the date of the report.
- C Descriptions of any take known to have occurred during the previous budget period.
- C A running tabulation of habitat created or restored by the Plan.
- C A description of all findings, conclusions, and results of monitoring, research, or Conservation Measures previously undertaken.
- C Any recommendation made by the Service or any state wildlife agency regarding the LCR MSCP.
- C Approval or rejection of any minor modification to the MSCP.

After presentation to the Steering Committee the Program Manager shall submit the Implementation Report, Work Plan, and Budget to the Service for its review and determination regarding the consistency of the past, current, and future implementation plans with the terms of the Conservation Plan and Permit. The submittal will note any matters in "Dispute," as that term is defined in the Funding and Management Agreement.

Within sixty (60) days after receipt of the Implementation Report, Work Plan, and Budget, the Service will submit its written evaluation to the Program Manager. The evaluation shall include the opinion of the Service regarding the consistency of the Implementation Report, Work Plan, and Budget with the requirements of the Conservation Plan and Permit. In the event the opinion of the Service is that the Implementation Report, Work Plan, and Budget demonstrates that Conservation Measures undertaken or proposed do not comply with the LCR MSCP and its Permit, it shall specify, in detail, in what regard the Implementation Report, Work Plan, and Budget is deficient and shall suggest what alternative measures might be undertaken.

The ultimate decision-making authority for actions taken by agencies with the Department of the Interior, including those matters which may be in "Dispute" pursuant to the Funding and Management Agreement, rests with the Secretary of the Interior.

Cost Share

The Program Cost of the LCR MSCP over its 50-year term is Six Hundred Twenty-Six Million One Hundred Eighty Thousand Dollars (\$626,180,000) in 2003 dollars, which will be adjusted annually for inflation over the 50 year term of the Program.

The Federal Parties shall bear fifty percent (50%) of the Program Cost, plus one hundred percent (100 %) of any costs of the LCR MSCP in excess of the Program Cost, with the exception of costs associated with an amendment of the LCR MSCP.

The State Permittees shall bear fifty percent (50%) of the Program Cost (Non-federal Cost Share). The California Permittees shall bear fifty percent (50%) of the Non-federal Cost Share. The Nevada Permittees shall bear twenty-five percent (25%) of the Non-federal Cost Share, and the Arizona Permittees shall bear twenty-five percent (25%) of the Non-federal Cost Share. Reclamation, with support of funding from California agencies, will implement the conservation and mitigation measures identified in the 2001 Biological Opinion for implementing 400,000 acre-feet annually in changes of point of diversion for California's Colorado River Water Use Plan. The LCR MSCP includes the potential extension of the Interim Surplus Guidelines beyond 2016 and the 400,000 acre-feet change in point of diversion as Covered Actions. The implementation of the 2001 Biological Opinion conservation and mitigation measures shall be credited against the requirements of the LCR MSCP in accordance with the HCP, and the budgeted cost of those measures shall be credited to the California Permittees in the amount that each has paid for the cost of implementing these conservation and mitigation measures.